

IN THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A method for call admission control in a fast dynamic channel allocation wireless communication system, comprising the steps of:

requesting that a call be admitted;

obtaining measurement results;

generating timeslot sequences by determining a figure of merit for each timeslot;

determining a plurality of code sets;

assigning ~~a code set to a~~ one of said plurality of code sets to one timeslot sequence, wherein ~~each~~ a successful assignment of a code set to a timeslot sequence is considered to be a solution;

selecting the solution having the lowest weighted total interference signal code power (ISCP);

allocating codes for the selected solution;

recording ~~the~~ a physical channel resource allocation information for the selected solution relating to the physical channel used; and

responding to the call admission request.

2. (Currently Amended) The method according to claim 1, wherein the obtaining step includes

collecting input parameters from the call admission request;

gathering the measurement results from a Node B and a wireless transmit/receive unit using the communication system;

retrieving a list of available timeslots; and

calculating the data rate.

3. (Original) The method according to claim 2, wherein the determining step is based upon the calculated data rate.

4. (Original) The method according to claim 1, wherein the figure of merit is a representation of the assignment quality of the timeslot.

5. (Currently Amended) The method according to claim 1, wherein the assigning step includes

selecting a code and a timeslot;

determining whether the code is available from ~~the~~ a code vector of the selected timeslot;

evaluating whether the code can be supported in the selected timeslot; and
recording the code allocation information.

6. (Original) The method according to claim 5, wherein the selecting step includes

selecting a spreading factor from the code set;
examining a code in the selected spreading factor; and
selecting a timeslot from the timeslot sequence.

7. (Original) The method according to claim 5, wherein the evaluating step includes

determining whether the selected code satisfies the constraints of the
wireless transmit/receive unit; and

estimating the noise rise and the code transmission power that would result
if the selected code is added to the selected timeslot.

8. (Original) The method according to claim 5, wherein the recording step includes updating the ISCP value.

9. (Original) The method according to claim 5, further comprising the step of recording the weighted ISCP value once a solution is found.

10. (Original) The method according to claim 5, wherein the steps are performed for each timeslot in the timeslot sequence.

11. (Original) The method according to claim 10, wherein the steps are performed for each code in the spreading factor.

12. (Original) The method according to claim 11, wherein the steps are performed for each spreading factor in the code set.

13. (Currently Amended) The method according to claim 1, wherein the allocating step includes updating ~~the~~ a code tree.

14. (Original) The method according to claim 1, wherein the recording step includes storing the information in a centralized radio resource management information database.

15. (Original) A system for call admission control in a fast dynamic channel allocation wireless communication system, comprising:

a wireless transmit/receive unit (WTRU), comprising:

a resource signal receiver;

a measurement device, for taking WTRU-specific measurements; and

a measurement signaling device, for signaling the measurements to the wireless communication system;

a Node B, comprising:

a resource allocation device;

a resource signaling device, for signaling resource allocations to said resource signal receiver; and

a measurement collection device, for collecting measurements from said measurement signaling device; and

a radio network controller, comprising:

a memory, for storing WTRU data and cell data received from said measurement collection device; and

a radio resource management (RRM) device, said RRM device accessing said memory to make call admission control decisions, said RRM device directing said resource allocation device to allocate resources to admit a call.